

Title (en)

NON-HALOGENOUS FAST CURING TWO-COMPONENT EPOXY ADHESIVE WITH FLAME RETARDANT PROPERTIES

Title (de)

NICHTHALOGENER SCHNELLHÄRTENDER ZWEIKOMPONENTIGER EPOXIDKLEBSTOFF MIT FLAMMHEMMENDEN EIGENSCHAFTEN

Title (fr)

DURCISSEMENT RAPIDE NON-HALOGÈNE ADHÉSIF ÉPOXY À DEUX COMPOSANTS PRÉSENTANT DES PROPRIÉTÉS IGNIFUGEANTES

Publication

EP 3275915 A1 20180131 (EN)

Application

EP 16182091 A 20160729

Priority

EP 16182091 A 20160729

Abstract (en)

In one aspect of the present disclosure, there is provided an adhesive precursor, comprising a first part (A) comprising: a first epoxy curing agent comprising at least one polyether amine and having an amine equivalent weight of at least 55 grams per mole of amine equivalents; a second epoxy curing agent distinct from the first epoxy curing agent or a secondary curative; a metal salt catalyst; and optionally, a toughening agent; a second part (B) comprising: a first epoxy resin; a second epoxy-based resin distinct from the first epoxy resin; at least one phosphorous-based first flame retardant; a core-shell polymer toughening agent; optionally an epoxy-based reactive diluent; and optionally, a filler material; wherein the total amount of the flame retardant system is lower than 25 wt.-% of the total curable adhesive precursor.

IPC 8 full level

C08G 59/50 (2006.01); **C08K 5/49** (2006.01); **C08K 5/521** (2006.01); **C09J 163/00** (2006.01)

CPC (source: EP US)

C08G 59/50 (2013.01 - EP US); **C08G 59/504** (2013.01 - EP US); **C08K 3/04** (2013.01 - EP US); **C08K 5/49** (2013.01 - EP US);
C08K 5/521 (2013.01 - US); **C09B 11/02** (2013.01 - EP US); **C09B 11/06** (2013.01 - EP US); **C09B 69/103** (2013.01 - EP US);
C09J 5/00 (2013.01 - US); **C09J 11/06** (2013.01 - US); **C09J 11/08** (2013.01 - US); **C09J 163/00** (2013.01 - EP US);
C08K 2003/026 (2013.01 - EP US); **C08K 2003/2227** (2013.01 - EP US); **C09J 2409/00** (2013.01 - US); **C09J 2463/00** (2013.01 - US)

Citation (applicant)

- EP 1622976 A1 20060208 - HENKEL CORP [US]
- US 3404061 A 19681001 - SHANE JAMES H, et al
- CA 2334274 A1 20010807 - GRAFTECH INC [US]

Citation (search report)

- [XYI] US 2011244245 A1 20111006 - ELGIMIABI SOHAIB [DE]
- [YA] US 2008166484 A1 20080710 - SMITH ARMSTRONG GORDON [US]
- [A] WO 2015195775 A1 20151223 - 3M INNOVATIVE PROPERTIES CO [US]
- [A] WO 2013142751 A2 20130926 - DOW GLOBAL TECHNOLOGIES LLC [US]

Cited by

CN112778951A; US2021324134A1; US11535699B2

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 3275915 A1 20180131; EP 3275915 B1 20221130; CN 109563241 A 20190402; US 2019241778 A1 20190808;
WO 2018022490 A1 20180201

DOCDB simple family (application)

EP 16182091 A 20160729; CN 201780045703 A 20170724; US 2017043472 W 20170724; US 201716318564 A 20170724